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84. Schield, Milo (2020c) Statistical Literacy: Scanlan's Paradox. ASA Proceedings of the International Statistical Institute. P. 1583-1611. Copy at www.StatLit.org/pdf/2020-Schield-ASA.pdf

85. Schield, Milo (2020d) Call for Research on Using Ordinary English to Describe and Compare Ratios. Research Proposal.   www.statlit.org/pdf/2020-Schield-Call-Research-English-Grammar-Ratios.pdf

86. Schield, Milo (2021a) Statistical Literacy: Teaching Confounding. USCOTS Invited Workshop. 6/26. www.statlit.org/pdf/2021-Schield-USCOTS.pdf

87. Schield, Milo (2021b).   Statistical Literacy for Policymakers.   ISI Invited session online. 7/16. www.statlit.org/pdf/2021-Schield-ISI.pdf

88. Schield, Milo (2021c).   Statistical Literacy: The Diabolical Denominator. Mathfest. Online 8/04 www.statlit.org/pdf/2021-Schield-MathFest.pdf

89. Schield, Milo (2021d).   Statistical Literacy approved for General Education at UNM. *American Statistical Association 2021 Proceedings of the Section on Statistics and Data Education*. P. 1192-1222. 8/11. Copy at www.StatLit.org/pdf/2021-Schield-ASA.pdf

90. Schield, Milo (2021e). Simpson's Paradox and Covid Deaths. ASA JSM Birds of a Feather Online 8/12. Copy at www.StatLit.org/pdf/2021-Schield-ASA-BOF.pdf

91. Schield, Milo (2021f). Offering Statistical Literacy: Administrators, Departments and Teachers. Copy at www.statlit.org/pdf/2021-Schield-Offering-Statistical-Literacy.pdf.

92. Isaacson, Marc and Milo Schield (2021). *Facts on File: Guide to Data Literacy.* InfoBase Publishing. https://www.infobasepublishing.com/Bookdetail.aspx?ISBN=9781646938773&Ebooks=1

93. Schield, Milo (2022a). Introducing Statistical Literacy: A Lesson Plan. ECOTS Activity 5/24. Copy at www.StatLit.org/pdf/2022-Schield-ECOTS-Lesson-Plan.pdf

94. Schield, Milo (2022b).   Teaching Statistical Literacy: Choice of Topics. ECOTS Birds of Feather Handout 5/26. Copy at www.StatLit.org/pdf/2022-Schield-ECOTS-BOF-Handout.pdf. One page.

95. Schield, Milo (2022c). Statistical Literacy: Seven Simple Questions for Policymakers. Special Stream on "Statistical and Data Literacy in Policy-Making". *Statistical Journal of the International Association for Official Statistics (SJIAOS)*. 38 (2022) 471-475. DOI 10.3233/SJI-220957. ISI Press. 6/12. Copy at www.StatLit.org/pdf/2022-Schield-SJIAOS.pdf.

96. Schield, Milo (2022d). Statistical Literacy goes beyond Quantitative Literacy. Mathfest.

97. Schield, Milo (2022e) Statistical Literacy: Thinking Critically about Confounding. 2022 Conference on Critical Thinking. Copy at www.StatLit.org/pdf/2022-Schield-CCT.pdf

98. Schield, Milo (2022f) Statistical Literacy: Thinking Critically about Statistics. 2022 Conference on Critical Thinking. Copy at www.StatLit.org/pdf/2022-Schield-CCT2.pdf

99. Schield, Milo (2022g). Statistical Literacy Math1300 Year 1 at UNM. JSM *2022 Section on Statistics and Data Education*. P. 2035-2065. Copy at www.StatLit.org/pdf/2022-Schield-ASA.pdf

100. Schield, M. (2022h). Association vs. Causation; Disparity vs. Discrimination. Inter. Conference on Teaching Statistics. DOI: 10.52041/iase.icots11.T1E2.   www.statlit.org/pdf/2022-Schield-ICOTS.pdf

BOOKS:

Schield, Milo (2005-2022). *Statistical Literacy: Seeing the Story Behind the Statistics*. See www .StatLit.org/Schield.htm

Isaacson, Marc and Milo Schield (2021). *The Facts on File: Guide to Data Literacy*. Published by Infobase.

SLIDES, POSTERS or INSTRUCTIONS:

Statistical Literacy: Talks without a paper. By Schield alone unless otherwise noted.

2022 Hurricane Ian: NHC Cone Advisories. Slides 10/2022

2022 Poverty Data by Race and Family Structure (Graphs since 1966) Slides 9/2022

2021 Ambiguity of Phi in Excel. One-page spreadsheet. 6/2021

2020 Covid19 Infections, Cases and Deaths. Slides. 11/21.

2020 Create PDF with Word 2013 using Adobe Distiller (Slides internal). Slides 9/9/20 PPTX

2020 PowerPoint: Create Audio and Video. Slides. 8/8/2020 PPTX [not enough space]

2020 Edit/Convert Zoom Recording Using AVS software. One-page instructions 8/1/2020

2020 Google drive: Share Content. Slides 4/2020

2020 ResearchGate: Replace paper. One-page instructions. 3/20/2020

2020 Coronavirus Covid-19: An Explanatory Model. Slides 7/19/2020.

2020 Coronavirus Covid-19: An Analysis. Slides 3/8/2020.

2019 NNN Annual Meeting: What is Numeracy? Statistical Literacy: An Introduction (10/13) Slides

2019 NNN Workshop at Palomar Community College. Statistical Literacy: An Introduction (9/20-21) Slides

2019 Univ. New Mexico: Teaching Confounder-Based Statistical Literacy (6/19) Slides

2019 USCOTS Workshop All. Ch 1, 2, 3, 4 and 13. 5/16 Teaching Confounding Roundtable.

2019 Gender Pay Gap: Uncontrolled vs. Controlled. April 4, MIS 264 PDF DOC

2018 Infant Mortality Rate: A National Embarrassment? Critical Thinking Club 12/5/2018. Slides PPTX

2018 Increasing Disparity: The Scanlan Effect. Critical Thinking Club Dec 5 2018. Augsburg U. Slides PPTX

2018 Why Voter Polls are Often Wrong. Twin Cities Critical Thinking Club Dec 2, 2018. Slides PPTX

2018 Increasing Disparities: The Scanlan Effect. National Numeracy Network 10/2018. Michigan State. Slides

2018 Data Literacy. The Gartner Conference. Dallas Texas March 2018. Slides 1D

2017 IQ and Gender. Cynthia and Milo Schield. Critical Thinking Club (CTC). Slides

2017 The Grammar of Quantitatively-Based Relations. Schield 11/17 NNN Barnard College. Slides

2017 Levels of Numeracy: How Much Critical Thinking. Schield Nov 2017 NNN Barnard College. Slides

2017 Down' Syndrome: By Birth Order and Mom's Age. 3/20/2017. Slides PPTX XLSX

2016 Why Election Polls Are Often Wrong Slides. CTC 12/4/2016. Why Clinton Lost (Trump Won)
    Slides, Exit Poll Data. Calculate Chance of Winning. Dec. 6, 2016.

2015 What's Wrong with Into Statistics? StatChat 10/27/2015 PPTX Gaise Update

2015 Hot Hand: Better than Chance. Univ. of St. Thomas. Fall 2015. Slides PPTX

2015 Comments on Cobb and De Veaux at USCOTS. USCOTS 2015 1up 6up PPTX

2015 Making Connections. Comments by Milo Schield. USCOTS 2015. Slides

2015 Critical Thinking: Past, Present and Future. Slides CTC 4/15. Averroes (~1170) vs Al-Ghazali (~1100)

2015 Augsburg's Above-Average Value-Added Education. To Augsburg Faculty 2/17/15. Food for Thought Slides

2015 Teaching for Transfer in Statistics Classrooms. Mathew D. Beckman, 2/24/15 StatChat, Macalester Slides.

2015 Statistically-Significant Shortcuts. 2/24/2015 Statchat. Macalester, St. Paul. Slides PPTX

2014 Business Analytics vs. Data Science. Nov 2014 DSI-MSMESB Tampa, FL. Invited Talk Slides. PPTX

2014 Big Data and Coincidence. Oct 2014 NNN-1 invited workshop at Carleton College. Slides.

2014 Explore Log-Normal Distribution of Incomes. Oct 2014 NNN Carleton C. Slides, Spreadsheet PDF PPT

2014 Create Distributions Empirically using Excel. Oct 2014 NNN, Carleton College. Slides PPT

2014 Statistically-Significant Correlations. Oct 2014 NNN-4 Invited Workshop at Carleton College. Slides PPT

2014 Segmented Linear Regression. By 2014 NNN-5 Invited Workshop at Carleton College. Slides.

2014 Teaching Big Data: Panel comments. May 20 E-COTS presentation. Slides.

2014 Two Big Ideas in Teaching Big data. ASA Twin Cities Chapter, Augsburg College on 3/20/2014. 6up, 1up.

2013 Adding Context to Introductory Statistics. ASA Twin Cities Chapter, Augsburg C. 5/22/2013. 6up 1up PPT

2012 Victor Cohn (1919-2000): A Retrospective: ASA Twin Cities Chapter, Augsburg C. 10/15/2012. 6up

2012 Keene State College Workshop: 1 Statistical Literacy 6up; 2 Critical Thinking 6up; 3 Coincidence 6up; 5 Reading Tables and Graphs 6up; 6 Reading Graphs and Tables 6up; 7 Statistical Literacy and Mathematics 6up; 8 Statistical Literacy: Confounding 6up. May 15-17, 2012.

2012 Coincidence in Run and Clusters. 6up, 1up. StatChat. Macalester College, St. Paul., MN. 3/8/2012.

2012 Statistical Literacy: A Math-Stat Alternative. 6up 1up.   T3Conference, Chicago 3/2/2012

2012 Statistical Literacy for All. 6up 1up.   Statistical Literacy at Augsburg 6up 1up. Lehman C. 2/24/2012

2011 Social Statistics: Egypt. February Slides

2011 Modeling in Context: Teaching Adjustment and Confounding through Common Core Standards. Poster, Schield & Kaplan. USCOTS

2011 Where Do Statistics Come From? - Setting the Table for Intro Statistics. Poster, Marc Isaacson at USCOTS

2011 Multiple Choice: Olympic Success. USCOTS Activity 6up   Marc Isaacson

2011 Hypothetical Thinking about Statistics: An Activity. May USCOTS 6up

2011 Odysseys Teach Critical Thinking. Poster, Augsburg College with Larry Copes. 5/10/2011.

2011 Statistical Literacy: Confounding. University of Texas, San Antonio 1/13/2011 6up Slides

2011 Statistical Literacy Worldwide: 2010. 1/6/2011 MAA JMM 6up

2010 Statistical Literacy: Confounding. University of St. Thomas 12/10/2010 6up 1up

2010 Quantitative Literacy Today: An Update. Carleton-PKAL conference. 10/08/2010 6up.

2010 Statistical Literacy at Augsburg College. Carleton-PKAL conference. 10/09/2010 6up

2010 Harper's Index November Slides

2010 Confounding UST December Slides

2010 Boys Adrift by Cynthia Schield CTC Sept 12, 2010 Slides

2009 Science Literacy Requires Statistical Literacy 11/09 SENCER Symposium 6up

2009 Statistical Literacy and Liberal Education 7/09 Free Minds '09 6up

2009 Several Radical Ideas to Help Students Interpret Introductory Statistics 6/2009 Brick & Schield USCOTS 2009

Speculative Statistics and Public Policy. 5/2009 NNN conference Univ. Washington, Bothell 6up

2009 Statistical Literacy: A New On-Line Gen Ed Course for Math Teachers 2/2009 Proposal for 2009 AMATYC

2008 Statistical Literacy talks at Anderson University 6up and at the Univ. of Kentucky (Lexington) 6up. 10/2008

2008 Confounder Influence on Attributed Cases, 7/2008. MAA MathFest. Madison, WI 6up 1up

2008 Binary Confounders as Mathematical Objects, 7/2008. European Conference on Methodology. Oviedo Spain

2008 Bayes' Comparisons 1/2008 StatChat, Macalester College (St. Paul, MN) 6up 1up.

2007 Civic Engagement: Numbers in the News. 10/07 AACU Civic Learning at Intersections, Denver CO 6up 1up

2007 Quantitative Literacy Core Concepts. 10/2007 Carleton QUIRK Project 6up   1up

2007 Teaching Statistical Literacy. 4/2007 National Numeracy Panel, Midwest Sociological Society Chicago 6up

2006 Statistical Literacy: An Introduction. 8/2006 Univ. Connecticut 6up   1up

2006 Statistical Literacy for Majors without Math Requirements. 3/2006 Univ. Wisconsin QL Conference 6up   1up

2006 Mathematics of Association in Quantitative Literacy. 1/2006 MAA 6up

2005 Statistical Literacy: Errors Reading Graphs. 12/2005 Kansas City Actuarial Club 6up

2005 Statistical Literacy and Critical Thinking, 7/2005 TOC Summer Seminar at Union College 6up

2005 Statistical Literacy and Epidemiological Reasoning, 7/2005 TOC Summer Seminar at Union College 1up 6up

2005 Quantitative Literacy: Core Concepts, 6/2005 MAA QL Workshop at Macalester College 6up 1Up Notes

2003 Statistical Literacy Survey, 5/2003 IASSIST Conference. 1up 6up

2003 Statistical Literacy at Augsburg, March 2003 Project Status. 1up, 6up

2002 Proposed Survey of Business Statistics Teachers, 8/2002 MSMESB 6up 1up

2001 Student Difficulties Reading Tables of Ratios. 12/2001 US Bureau of Census 6up

2001 Statistical Literacy: How Does It Relate to Q/L? PKAL Snowbird UT 7/01. Abstract, 6up, 1up

2001 Effectiveness of Statistics in Schools of Business. 6/2001 MSMESB Troy NY 1up

2001 The Grenada Conjectures: The Future of Statistical Education. U. of Grenada Jan 18, 2001. 1up 6up

2000 Teaching Conditional Thinking Using Ratios. Western Conference Teaching Statistics (WCTS1) 3/00 Notes

2000 Teaching Statistics Using Relevant Data. Western Conference on Teaching Statistics (WCTS1) 3/2000 6up

2000 Grammar of Statistics: Rates, Percentages and Risk. 3/2000 Augsburg College   6up

2000 Statistical Literacy: Numbers as Information. Wendy Treadwell UMn 2/2000   6up

1999 Statistical Literacy: Standards for Content. 11/1999 AMATYC 6up

1999 Statistical Literacy: Reading Rates and Percents. 10/1999 APDU 6up

WEBSITE:

Schield, Milo (2003-present). *Statistical Literacy Website:*   Schield is the editor, webmaster and owner of the world's largest website dedicated exclusively to statistical literacy. He selects all the materials and has authored a yearly StatLit News: a compendium of grants, books, articles and activities related to Statistical Literacy. See www.statlit.org/1StatLitNews.htm. In 2018, this website had more than 185,000 page views (from 75 pages), 330,000 visits and 440,000 downloads (from 1,205 papers, 81 Excel-related items and 396 slideshows).

WORKSHOPS:

Schield, Milo (2000). Teaching Conditional Thinking Using Ratios at the Western Statistics Teachers Conference in Colorado. Copy at www.StatLit.org/pdf/2000Schield-WSTC1-Notes.pdf

STATISTICS-RELATED RESEARCH PAPERS

Schield, Milo (1996). Review of *The Evolution With Age of Probabilistic, Intuitively Based, Misconceptions* by Efraim Fischbein and Ditza Schnarch. Presented at RSS Centre for Statistical Education, Nottingham. See www.StatLit.org/pdf/1996-Schield-Review-Fischbein-Schnarch.pdf

Schield, Milo (1997). Philosophical Issues in Statistical Inference. Augsburg Philosophy Colloquium. See www.StatLit.org/pdf/1997Schield-Augsburg.pdf

Schield, Milo (1997). Median Overlap, Misclassification and R-square. Technical Paper. See www.StatLit.org/pdf/1997-Schield-Median-Overlap.pdf

Schield, Milo (1997). Statistical Literacy, QR and QL. Technical/Background Paper. See www.StatLit.org/pdf/1997-Schield-Statistical-Literacy-QR-QL.pdf

Schield, Milo (1999). Notes on Tufte's Presentation. Copy at www.StatLit.org/pdf/1999-Tufte-presentation-Notes-by-Schield.pdf

Schield, Milo (1999). ASA Ethics Committee Guidelines: Comments & Recommendations. JSM. Copy at www.StatLit.org/pdf/1999-Schield-ASA-Ethics-Committee.pdf

Schield, Milo (2015). Statistical Literacy Roundtable Summary. USCOTS Roundtable. Organized and chaired by Milo Schield. www.statlit.org/pdf/2015-USCOTS-Statistical-Literacy-Roundtable.pdf

Schield, Milo (2015). Prevalence of Statistical Words and Phrases in the Harvard Case Studies. Technical paper. Copy at www.statlit.org/pdf/2015-Schield-HBR-Statistical-Words.pdf

VIDEOS:

Schield, Milo (2022). Statistical Literacy: Seven Simple Questions for Policymakers. IASE webinar video (9 minutes). Copy at www.statlit.org/v/2022-Schield-IASE.mp4

Schield, Milo (2022). Statistical Literacy: Critical Thinking about Confounding. (25 minutes). See https://drive.google.com/file/d/1RCu7ZC81IWdQGR4RpU0LIhWbuFN0ggx4/view?usp=sharing

Schield, Milo (2022). Statistical Literacy: Critical Thinking about Statistics. (25 minutes). See https://drive.google.com/file/d/14QFCPm_WijQUZiU7IN9iCuYptVAwOHs3/view?usp=sharing

Schield, Milo (2021). Statistical Literacy Approved for General Education at U. New Mexico. USCOTS See http://www.statlit.org/V/2021-Schield-ASA-Slides.mp4 and http://www.statlit.org/V/2021-Schield-ASA-Slides-Speed.mp4

Schield, Milo (2021). Statistical Literacy: The Diabolical Denominator. Mathfest. Copy at http://www.statlit.org/V/2021-Schield-MathFest-Slides.mp4

Schield, Milo (2020). Controlling for Context by Standardizing. ECOTS (5 minutes). Copy at http://www.statlit.org/V/2020-Schield-eCOTS-Slides.mp4

Schield, Milo (2015). Statisticians: Making our World a Better Place. USCOTS video (4.5 minutes). See www.statlit.org/swf/2015-Schield-USCOTS-AIDS.mp4

Schield, Milo (2012). Coincidence in Runs and Clusters. E-COTS web-based video presentation. See www.statlit.org/swf/2012Schield-Coincidence.swf

AUDIO:

Schield, Milo (2014). Two Big Ideas for Teaching Big Data: Coincidence and Confounding. ECOTS invited webinar (26 minutes). At https://www.causeweb.org/ecots/ecots14/35/

Schield, Milo and Marc Isaacson (2012). "A second statistics course is needed. What should it be?" ECOTS. At https://www.causeweb.org/ecots/ecots12/breakouts/7/

EXCEL DEMONSTRATION WORKSHEETS

1. Schield, Milo (2010). Excel Demo of Marilyn vos Savant's Monty-Hall Three-Door problem. Demo at www.statlit.org/Excel/2010-Schield3Door-Demo.xls

2. Schield, Milo (2010). Excel Demo of Marilyn vos Savant's Four-Envelope problem. Excel demo at www.statlit.org/Excel/2010Schield4EnvelopeDemoSavant.xls

3. Schield, Milo (2012). Excel Demo of the longest run in flips of a fair coin. Demo worksheet at www.statlit.org/Excel/2012Schield-Runs.xls

4. Schield, Milo (2012). Excel Demo of unlikely patterns in a two-dimensional grid with 1 chance in 100 grains of rice. Demo worksheet at www.statlit.org/Excel/2012Schield-Rice.xls

5. Schield, Milo (2012). Excel Demo of von Mises Birthday problem. Demo worksheet at www.statlit.org/Excel/2012Schield-Bday.xls

6. Schield, Milo (2016). Excel Demo of the relationship between sample means and medians when sampling from a uniform or a Normal distribution. Demo worksheet at www.statlit.org/Excel/2016-Schield-Mean-Median=Compare-1.xlsx

POLICY PROPOSALS, GRANT APPLICATIONS AND MISC.

1. Schield, Milo (1999). ASA Ethical Guidelines: Comments and Recommendations. ASA Committee on Professional Guidelines. See www.statlit.org/pdf/1999-Schield-ASA-Ethics-Committee.pdf

2. Schield, Milo (2000). Application for the ASA/NSF/BLS/Census Bureau Fellowship Program. www.StatLit.org/pdf/2000SchieldCensusASA.pdf

3. Schield, Milo (2000). Initial 2001 Grant Proposal to the W. M. Keck Foundation. www.StatLit.org/pdf/2000-Schield-Keck-Proposal1.pdf

4. Schield, Milo (2001). Revised 2001 Grant Proposal to the W. M. Keck Foundation. www.StatLit.org/pdf/2001-Schield-Keck-Proposal2a.pdf and 2001-Schield-Keck-Proposal2b.pdf

5. Schield, Milo (2006). NSF Grant Proposal: Developing a Statistical Literacy Turnkey Training System. 2006 NSF. Copy at www.statlit.org/pdf/2006-Schield-NSF.pdf

6. Schield, Milo (2014a). PKAL-TIDES Grant Proposal. www.statlit.org/pdf/2014-Schield-PKAL.pdf or at www.StatLit.org/pdf/2014-Schield-PKAL-TIDES-Proposal.pdf

7. Schield, Milo (2014b). NSF IUSE Grant Proposal. At www.statlit.org/pdf/2014-Schield-NSF.pdf Cover page at www.StatLit.org/pdf/2014-Schield-NSF-IUSE-Proposal.pdf

8. Schield, Milo (2015a). USCOTS 2015 Lifetime Achievement Award Nomination Packet. www.statlit.org/pdf/2015-USCOTS-Schield-Lifetime-Nomination-Packet.pdf

9. Schield, Milo (2015b). Nomination for the ASA-Pearl 2015 Causality Award. www.statlit.org/pdf/2015-Schield-Pearl-Causality-Award-Submission.pdf

10. Schield, Milo (2015c). Wiley Textbook proposal: Practical Statistics for Professionals. www.statlit.org/pdf/2015-Schield-Wiley-Book-Proposal.pdf

11. Schield, Milo (2019). Honda grant proposal via UNM (11/15) Unsuccessful

12. Schield, Milo (2020). Honda grant proposal via Augsburg College (3/1) Unsuccessful

13. Schield, Milo (2020). NAS/NSF Idea Proposal. www.statlit.org/pdf/2020-Schield-NSF.pdf (7/15)

Schield: Other Statistical Creations

SUMMARIZE DATA IN CHARTS AND TABLES:
- XL1A: Use nominal frequency data to create pie & bar charts.   Output   Slides   Input
- XL1B: Use nominal pivot-table data to create pie & bar charts: Output   Input
- XL1C: Create time-based line graphs. Linear and Log display.   Output   Slides   Input
- XL1D: Create six different two-way Pivot tables.   Demo Output.   Slides   Data Input.

MODEL DATA USING EXCEL   Pulse dataset
- XL2A Chart Trendline: Linear 1Y1X (3 graphs) Slides
- XL2B Chart Trendline: Non-Linear 1Y1X (7 graphs) Slides
- XL2C Chart Trendline: Linear 2Y1X (4 graphs) Slides
- XL2D Chart Trendline: Linear 3factor 1Y1X (Pivot table, 2 graphs)   Slides
- XL3A: Toolpak Regression: Linear (5 graphs) 2 predictors. QQB: Output Slides Input
- XL4B: Logistic Regression 1Y1X (Schield OLS nudged).   Demo   Slides   Input
- XL4C: Logistic Regression 1Y2X (Schield OLS nudged).   Demo   Slides   Input

CREATE DISCRETE DISTRIBUTIONS USING EXCEL:
- XL4A: Create Binomial, Hyper geometric and Poisson.   Output   Slides   Input

CREATE LOG-NORMAL DISTRIBUTIONS (GIVEN MEAN AND MEDIAN):
- XL5A: Create distribution of Subjects: Output.   Slides   Data Input
- XL5B: Create distribution of Subjects & Incomes: Output.   Slides   Data Input

CREATE HISTOGRAMS AND SAMPLING DISTRIBUTIONS USING EXCEL:
- XL3B: Use Toolpak HISTOGRAM command. Output   Slides   Input
- XL3C: Use COUNTIF and FREQUENCY functions. Output   Slides   Input

CREATE HISTOGRAMS AND SAMPLING DISTRIBUTIONS USING EXCEL:
- Create sampling distributions for a single die using COUNTIF in Excel 2013 (n=4, 16, 25, 50, 200). Step-by-step demo: Excel 2008 1up 6up and PPT.   Results. Data (xlsx)

CREATE AND COMPARE CONFIDENCE INTERVALS USING EXCEL:
- Create Confidence Intervals using Excel 2010.   6up, 1up.
  - Compare Z and T Statistics using Excel 2003.   pdf
  - Compare Confidence Functions using Excel 2010: pdf, xlsx.
- Compare Two Confidence Intervals Excel 2010. pdf,   xlsx
- Display Paired Confidence Intervals using Excel. Template (xls).   Demo: 6up, 1up.

CREATE HYPOTHESIS TESTS USING EXCEL:
Isaacson data set (240 rows, 8 columns).
- Hypothesis test for a single Population: **Z-Test function**.   Excel 2008 demo: 6up, 1up.
- Hypothesis tests for two populations: **T-Test function.** Excel 2008 demo: 6up, 1up.
- Hypothesis tests for two populations: **T-Test command**. Excel 2013 demo 6up, 1up.
- Statistically-significant correlations as a function of sample size: A Simple Model (xls).

SPACE PHYSICS PAPERS:

1. M. Schield (1968). The Configuration of Geomagnetic Field Lines above the Auroral Zones, Copy at www.StatLit.org/pdf/1968-Milo-Schield-PhD-Dissertation-Rice.pdf

2. M. Schield (1969). Pressure Balance between Solar Wind and Magnetosphere [Preview] *Journal of Geophysical Research*, 74, 5, doi:10.1029/JA074i005p01275, 1969 Copy at www.StatLit.org/pdf/1969-Schield-JGR.pdf

3. M. Schield (1969). Correction to Paper by Milo A. Schield, 'Pressure Balance between Solar Wind and Magnetosphere' *Journal of Geophysical Research*, 74, 21, doi:10.1029/JA074i021p05189, 1969 Copy at www.StatLit.org/pdf/1969-Schield-JGR2.pdf

4. Schield, M. A.; Freeman, J. W.; Dessler, A. J., (1969) "A Source for Field-Aligned Currents at Auroral Latitudes" *Journal of Geophysical Research*, Vol 74,1. p.247 doi:10.1029/JA074i001p00247 Copy at www.StatLit.org/pdf/1969-Schield-Freeman-Dessler-JGR.pdf

5. M. Schield and L. Frank (1970). Electron Observations between the Inner Edge of the Plasma Sheet and the Plasmasphere. [Preview] Journal of Geophysical Research, 75, 28, doi:10.1029/JA075i028p05401, 1970 Copy at www.StatLit.org/pdf/1970-Schield-Frank-JGR.pdf

6. M. Schield (1970). Drift of Charged Particles in a Simple Geometric Field. University of Iowa conference paper.

PHILOSOPHY AND SCIENCE PAPERS:

1. Schield (1991). Summary of the 1954 *Handbook of Logic* by Roland Houde and Jerome Fisher. See www.StatLit.org/pdf/1991-Schield-Summary-1954-Houde-Fisher-Handbook-of-Logic.pdf

2. Schield (1993a). Condensed version of Lewis Carroll's *Symbolic Logic* (1896). See www.StatLit.org/pdf/1993-Schield-Summary-1896-Carroll-Symbolic-Logic.pdf

3. Schield (1993b). An Analysis of Consciousness. Augsburg Philosophy Colloquium. Copy at www.StatLit.org/pdf/1993-Schield-Philosophy-Consciousness.pdf

4. Schield, Milo (2004). Resolving Three Key Problems in the Humanities. *The International Journal of the Humanities*. Vol. 2, Num. 3. P. 2375-2385. See www.StatLit.org/pdf/2004SchieldNDIH.pdf

5. Schield, Milo (2005). Making Science a Core Liberal Art for the 21st Century. Project Kaleidoscope. See www.StatLit.org/pdf/2005SchieldPKAL.pdf.

6. Schield, Milo (2009). Promoting Objectivity in Science and Ethics. FreeMinds 09. See www.StatLit.org/pdf/2009SchieldFreeMinds.pdf

Papers shown in boxes were invited or refereed and published in journals, magazines or books.

Milo Schield: CV

DR. MILO A. SCHIELD

Synergistic Activities:

He is a fellow of the American Statistical Association, the US Coordinator of the International Statistical Literacy project (ISLP), an elected member of the International Statistical Institute (ISI), the Past-President of the National Numeracy Network (NNN), and the editor and webmaster of www.StatLit.org. Dr. Schield was the Director of the W. M. Keck Statistical Literacy project – a project "to develop statistical literacy as an interdisciplinary curriculum in the liberal arts."

He was a tenured professor in Business Administration at Augsburg College and chair of that department. He has a Ph.D. in theoretical Space Physics from Rice University. He has been a consultant with the University of New Mexico in implementing his statistical literacy course. His textbook (Statistical Literacy: Critical thinking about Everyday Statistics) is being published by Kendall Hunt.

He has taught traditional statistics at the undergraduate level for over 20 years; he has taught critical thinking at the undergraduate level for 10 years and at the graduate level for two; he has taught statistical literacy for over 20 years.

SESSIONS AT CONFERENCES: Dr. Schield has organized 17 sessions on statistical literacy at national meetings of the American Statistical Association. Speakers have included Dr. Donald Rubin (Harvard), Dr. Joel Best, author of *Damned Lies and Statistics*, Joe Abramson, author of *Making Sense of Data*, Nicholas Eberstadt, author of *The Tyranny of Numbers*, Jessica Utts, author of *Seeing Through Statistics*, Robyn Dawes, author of *Everyday Irrationality*, Vic Cohen, author of *News and Numbers*, Tom Wonnacott, author of numerous statistics textbooks and Jane Miller, author of *The Chicago Guide to Writing about Numbers*. He also organized a session on Observational Studies and Multivariate Thinking at the International Statistical Institute (ISI) conference in Lisbon (Dr. Donald Rubin, Sir David Cox and Nanny Wermuth).

TALKS: He has given 100 papers (over 150 talks) on statistical literacy in 17 countries on six continents. In the US, he gave the keynote address at a conference sponsored by Project Kaleidoscope (PKAL). He has given talks at Making Statistics More Effective in Schools of Business (MSMESB), the Association of Public Data Users (APDU), the Mathematical Association of America (MAA), the American Mathematics Association of Two Year Colleges (AMATYC), the International Association of Social Science Information Services and Technology (IASSIST) and the US Department of the Census and the Bureau of Labor Statistics. Internationally, he has given talks at ICOTS (Singapore, South Africa, Brazil and Slovenia), ICME (Tokyo and Copenhagen). ISI/ISE (Australia, Portugal and Ireland), and IASE (Sweden, Portugal and Ireland). He has given invited talks in China, England, Scotland and Wales.

RECOGNITION: In his book, *More Damned Lies and Statistics*, author Joel Best noted the many problems facing this movement and said, "*Despite these obstacles, a small educational movement advocating statistical literacy has emerged. Professor Milo Schield, Director of the W. M. Keck Statistical Literacy Project at Augsburg College in Minneapolis, is the movement's leading voice.*" Schield's papers have earned over 1,000 citations as of 12/2022.

Professional Preparation:

Iowa State University	Physics major; economics minor	B.S.
University of Illinois	Physics major	M.S.
Rice University	Space Physics	Ph.D.

Academic Appointments:

University of New Mexico	Department of Mathematics & Statistics	2019-Now
Augsburg College	Department of Business Administration	1985-2022